

# ABSTRACT

The transmission of the rotational movement to the driving pinion of the carriage is provided by:

- a first gear train with a cage mounted so that it can rotate about the axial shaft and the crown wheel of which meshes with a pinion fitted onto the shaft of an electric motor carried by the body, this train carrying at least two superposed planet pinions and meshing, in the case of the upper one, with a set of teeth formed around the axial shaft and, in the case of the lower one, with an output sun gear,

- a second train, the sun gear of which is secured to the output sun gear of the first train and meshes with the upper planet pinion of at least one set of superposed planet pinions which are mounted so that they are free to rotate in a continuation of the body, the lower planet pinion meshing with a set of teeth which, formed on the driving pinion of the carriage, is distinct from the set of teeth that collaborates with the rack of this carriage,

these two sun gears having ratios which are other than 1 and inverse, while the electric motor driving the cage and the one translating the quill are powered under the control of the command and control unit.